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The Public Health Journal

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Canadian Public Health Association

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TORONTO, JUNE, 1922

No. 6

SPECIAL ARTICLES

PUBLIC HEALTH ORGANIZATION

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MISS ZADA KEIFER

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BRANCHES AND AGENCIES THROUGHOUT THE DOMINION

The Public Health Journal

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TORONTO, JUNE, 1922

No. 6

Public Health Organization

BY JAMES ROBERTS, M.D., *Medical Officer of Health, Hamilton, Ont.*

THE Modern Public Health Movement is less than a century old. A more accurate recital of its life history would ascribe its birth to the pioneer studies of Louis Pasteur. Its period of adolescence may be said to have been contemporaneous with the discoveries of Koch, Lister, Eberth, Gaffky, Klebs, Loefler, Manson, Ross, Walter Reed and others, during which time the causative bacteria and protozoa of the more fatal infections were isolated and studied, attention focused on the person sick with disease and great reliance laid on the principle of quarantine and the practice of disinfection.

The last ten or fifteen years has witnessed a radical transformation in the minds of those entrusted with official health administration, with respect to two important phases of the Public Health Problem at least. In the first place the old obsession not at once dissipated by laboratory investigation, that the source of man's infections were traceable to his environment, has rather suddenly been displaced by present day beliefs resulting from fuller and more accurate knowledge gained by a combination of laboratory and epidemiological studies. The modern theory of infection finds the source of disease in the individual himself—the excretions and emanations of his body, and the transmission of the virus to his fellow beings by contact, direct or indirect, the well nigh universal route.

Secondly, the perspective of the sanitarian, has undergone a remarkable change and his horizon has tremendously widened.

Papers at a conference representative of every Health Department in Ontario on topics such as "Prenatal Care," "Squint," "More efficient care of Mothers," "How to produce a clean and safe milk supply," attest the character and significance of the revolution in our ideas as to what may reasonably be considered within the province of the health official and calculated to absorb his energies.

In addition to the control of communicable diseases, supervision of water supplies, sewage, housing, and elimination of nuisances, we do not hesitate to include in the category of Public Health Activities such subjects as Infant Welfare, School Hygiene, Public Health Education, Industrial Hygiene, Dental Hygiene and Personal Hygiene. These and other matters of perhaps lesser but vital importance are to-day regarded without suspicion of protest as coming legitimately within the purview of the regularly constituted health authorities.

The place of Mental Hygiene in the future program of public health, I might allude to separately because of its importance. "Doubtless," says Stewart Patton, "we shall soon visualize the present opportunity, see the problems in their right perspective and make provision for teaching mental hygiene in connection with departments of hygiene. As a matter of fact many physicians do not yet recognize the importance of considering these two departments, physical and mental hygiene, as inseparable and representing two phases of one great problem."

In the April issue of *Mental Hygiene*, Haven Emmerson says, "we can't go forward on any public-health campaign without:

Public understanding.

Medical education and leadership.

Facilities for diagnosis and care.

Study, research, and information.

All health campaigns have gone through these phases. The principles are similar in all; the results in mental hygiene promise more than others because of the quality of them. The essential spirit of health and happiness is mental and has a future as far beyond that of physical-disease control as the mind of man is the greater objective for which we build the healthy body."

In this brief reference to the history of the Public Health Movement and what it to-day comprehends, I have tried to justify my belief that this movement freed from its heritage of superstition and fallacy, and having profited by the mistakes, and overconfidence of its youth, is now at the threshold of its maturity anticipating a measure of future success as shall result not only in reducing infection to a minimum, but in ensuring to everyone a hitherto undreamed of legacy of longevity and happiness.

Such of the more intelligent and altruistic sections of the laity as take an interest, active or otherwise, in the welfare of the community have grasped the fundamental conceptions of the New Public Health. Will it be necessary for this educated lay public to

point out to the medical profession and the existing health administrators their present opportunity and responsibility, and to appraise them of the fact, that insofar as the future of their work and their influence is concerned, it may well be that the present is the accepted time, and to-day the day of salvation?

My object therefore in this paper is merely to suggest in what directions future efforts of our Health Departments might be profitably exerted, while attempting also to outline very briefly changes in machinery and construction necessary to maintain our position as leaders and directors in the new era, and calculated at the same time to secure best and most permanent results.

The present system of administration reflects quite characteristically the rapidity of the evolutionary changes in our ideas with respect to the causation of disease, and the method of prevention, and in my opinion leaves much to be desired. It may be claimed, and has been emphasized from time to time by those qualified to speak with authority, that variety of service, difference of organization and lack of standard method of procedure in Health Department Local Administration have peculiar points of advantage, and it might further be urged that to set a pattern or standard method of procedure might tend to minimize the value of the personal equation in the success of such health administration, and to stifle local initiative and dampen local enthusiasm. These arguments are worthy of mature consideration, but if a uniform method of procedure, a standard unit of organization, constituting a system by which, for instance, facilities for good work, scope of activities could be estimated, and results compared, while at the same time our service to the public could be simplified and rendered of the highest efficiency, we as executive health officers, ought to be prepared and willing to sacrifice our individual ideas and predilections to the dictates of a higher and better service. How best can this be achieved?

I believe by an extension and elaboration of our present system of Health Districts. No one in close touch with matters pertaining to the Public Health in the Province of Ontario during recent years, will question for a moment that the revision of the Public Health Act of 1912, the amendments thereto, and particularly the division of the Province into approximately equivalent units of population for purposes of greater efficiency of administration, has been productive of encouraging results. Among the changes for the better, it is safe to say that the more direct interest of the District Health Officer in the work of the Local Board has had a

stimulating influence on the work of the Local Officers, and has led to the awakening of a keener interest in health matters in very many communities throughout the Province. The sympathies of the District Officers have been enlisted on the side of Local Officers to the extent of securing better salaries, official backing, and in many instances more generous finances for the carrying on of effective work. It has become the exception rather than the rule for outbreaks of infectious disease to assume dangerous proportions before arousing the attention of the local authorities, which fact in itself regardless of other considerations, tends greatly to increase the confidence of the general public in the purpose of Health Officer and to create respect for his official position.

Several of the states in the American Union have evolved a plan similar in operation to that in Ontario for the appointment of District Officers, the duties of which are similar in character but with salaries provided for rather meagre and unsatisfactory. The Ohio law of 1919 provides that each county and each city of more than 25,000 population must employ for full time service, a health officer, a public health nurse and a clerk with salaries for such whole time, county and municipal officer of \$2,000 to \$6,000 a year, and to be paid from local funds. In my opinion the general adoption of some such plan would be a step, not only in the right direction but productive of benefits hitherto unrealized in the field of preventive medicine. I would go further and assert with confidence that some such innovation is an essential prerequisite to any marked progress in securing the advantages in community health and happiness that our scientific knowledge warrants us in aspiring to immediately, and is also unquestionably demanded if our responsibility as health officials is to receive the recognition it deserves, and be associated less in the public mind as a popular text for semi-pro articles in the daily press, or flashy outbursts in the monthly magazines, rather than a vital force in the daily life and habits of the people.

It is true that in our larger centres of population there has been remarkable progress during recent years in the adoption of scientific methods, particularly in the practical application of laboratory findings to the routine departmental work. In many of these centres we have full time health officers, full time bacteriologists, qualified food inspectors, and a corps of public health nurses; each division working in harmony with the others toward the prevention of preventable diseases. Even with such impressive equipment and elaborate machinery supported by annual

appropriations by no means of trifling or insignificant proportions, can it be truthfully asserted that we are accomplishing more than lopping off the branches, rather than striking at the root of the giant ygdrasil under the protecting shade of which the forces of disease and death threaten continually the welfare and happiness of our people? The exanthematous diseases still kill their thousands; the great white plague its tens of thousands annually. Lest we forget, let us call to mind that within a period of less than four years, a devastating epidemic swept over this continent leaving in its wake a death toll of more than half a million souls and yet up to the present time there has been no drastic demand for such a reorganization of our health forces as shall prepare us to cope with a similar emergency or minimize the handicaps and unpreparedness of that trying period. The epidemic of infantile paralysis in 1910 lingers like a grim spectre in the public memory, haunting the minds of anxious mothers with the return of summer days, while the pathetic victims of its malevolence are daily to be seen on the streets and public places of every town and city.

In my own municipality largely through the efforts of a voluntary organization carrying on anti-tuberculosis work, the deaths from this disease have declined from 75 attributable to pulmonary and surgical types combined in a population of 60,000 persons during 1906, to 54 during 1920 in a population approximating closely 120,000, with slight fluctuations of favorable or unfavorable significance in the intervening periods. With the exception of the campaign being carried on in three or four cities, such as London, Toronto and Windsor, little attempt at intensive warfare is being waged against consumption.

With respect to diphtheria, an analysis of diphtheria death registrations in Ontario between the years 1880 and 1918, by Professor Fitzgerald, has shown that there has been a steady decline in death rate from this disease during these years. Although the population increased from 1,884,000 in 1880 to 2,800,000 in 1918, the deaths from diphtheria fell from 1,251 in 1880, to 335 in 1918. Notwithstanding this remarkable achievement, it is astonishing to note in the selfsame pamphlet that "there is a steadily increasing case incidence even though the case fatality rate has been diminishing and that this is in harmony with the facts observed in many other parts of the world." Dr. W. H. Park, director of the bureau of laboratories in the New York City Department of Health, states with respect to immunizing effect of toxin-antitoxin injections, that the duration of the immunity in at least 90 per cent.

of the children injected is for more than six years and probably for the remainder of life. Fifteen per cent. of the entire school population of that city have been immunized. In two years the mortality from diphtheria has fallen from 22 per 100,000 to 16 per 100,000. During the same years the mortality in the rest of the state has slightly increased. If encouraging results are to be anticipated from the use of this preventive measure why not a more immediate and general utilization of its benefits in the eradication of this menace to the lives of school children?

Time will not permit even a feeble attempt at enumeration of the fields of Public Health Endeavor in which by reason of insufficient funds and imperfect organization the urban M.O.H. is not permitted to engage except after a desultory fashion. The adequate housing of our artisan population is in its infancy. Our child welfare work is spasmodic and fragmentary; our school inspection imperfect; industrial hygiene, as yet not much beyond the stage of experimental research. We have scarcely done more than touch the fringe of the venereal disease dilemma. In the domain of mental hygiene, while the problems of delinquency, incorrigibility and criminality are receiving some attention, the question of how to increase the stock of the thrifty and capable and shift from their shoulders, the burden of the unenterprising rich and unenterprising poor is still in the novitiate stage.

If this is the state of affairs in our large cities, what shall be said of hygienic advancement in our smaller cities, towns and rural districts? In some of these, particularly in the rural districts, the last decade has witnessed a marked improvement in the sanitation of rural homes with regard to essential features, but in many sections the ear marks of progress are still sadly lacking. Respiratory infection from neglect of personal hygiene and circulatory disturbances from exposure and overwork are very prevalent. Small outbreaks of typhoid fever are still a frequent occurrence among our suburban populations, while towns and smaller cities in many instances require the constant supervision of the central authorities to ensure the purity of their water supply. It is stated by those in close touch with the tuberculosis problem, that this disease is surprisingly prevalent in our farming communities. It is only in the last two or three years, through the Bureau of Child Hygiene of the Provincial Board of Health, that active interest in the care of babies and the promotion of child welfare has been introduced in our towns and smaller cities. No cities of under 20,000 people employ a full time health officer. They

can not afford to do so, primarily, from lack of funds. In populations of less than 15,000 persons, not to speak of towns, villages and rural municipalities, full time health officers, bacteriologists, milk and dairy inspectors are out of the question, because the expense of maintaining such a staff is prohibitive, and moreover, if finances were forthcoming for their employment, the work would be insufficient to occupy their undivided attention, with consequent waste of funds, dissatisfaction, criticism and disparagement of public health work.

My contention is that most of our difficulties in providing an adequate service, and one that would command more universal respect, is due to the fact that our unit of administration is too small. Given a population of from 25,000 to 50,000 persons—I leave aside the method of apportioning revenue to be raised as purely a matter of detail—we have first and most important to provide a full time health officer. This official, to be successful, must, as with any other vocation in life, be first intelligent and capable of doing this particular kind of work, and he must also be specially educated and trained for his work. The popular misconception that any graduate from a medical school is competent to assume the duties of health officer is responsible for many of our shortcomings in the practice of prevention medicine and is an obstacle to progress. Our universities are doing much to gradually eradicate this heresy. The scriptural implication that no man can serve two masters is fully exemplified in the attempt of the physician dependent on practice for a living, to discharge satisfactorily the duties of M.O.H. If he carries out the duties as a side issue to his daily routine, the importance of the work is discounted or degraded in the eyes of the public; if he is faithful and conscientious he makes enemies and injures his reputation. The full time health officer should above all things, be imbued with the idea that his work is a public necessity and a solemn trust. Talent, superabundant energy and diplomacy will not suffice if there is absence of this conviction. He ought to be held responsible for the public health of the community using the term in its broadest sense. I think the words "public health" convey a rather hazy and indefinite meaning to the man on the street, and if it were possible to rechristen our Health Departments into Departments of Preventive Medicine our prestige would be wonderfully enhanced.

Given a population such as I have mentioned merely by way of suggestion, for which a competent health officer has been provided and his tenure of office sufficiently secured, there should be an ade-

quate revenue for the support of a health department organized to meet the special needs of the area it is intended to serve. A Commissioner, Board of Health or Governing Body of some political sort may be included but is not indispensable. An appointee of the Government answerable to the central authority as in the case of the District Officers and relying for criticism or reward on a body capable of judging intelligently, has advantages not to be ignored. There should be a well-equipped central building or office from which the direction of all the personnel should proceed. Call it a Health Department, Health Centre, Community Centre, Department of Preventive Medicine, as you please—names are immaterial, function of chief importance, and this should be the prevention of disease. A small but efficient laboratory is essential and cannot be dispensed with. The laboratory gives scientific direction and ensures the co-operation of the up-to-date practitioners of the district. An epidemiologist, public health nurses, sanitary inspectors, should be provided.

From such a centre as I have sketched in barest outline of which there should be sufficient number to permit of intensive work through the Province, could be administered every kind of preventive effort—control of communicable diseases, supervision of housing, food, water supplies, child welfare, sanitation of school buildings and supervision of school children, prenatal work, mental hygiene and the dissemination of suitable information of an educational character.

In sparsely settled districts where hospital facilities are not easily procurable the equipment of temporary hospitals might be undertaken under conditions of special stringency. Physical examination might be provided for those not well, but who do not consider themselves sick enough to go to bed or a hospital. Think of the inestimable advantage to the community from a financial viewpoint of enabling those in the ambulatory stages of disease to continue their accustomed calling, and to provide for themselves and their families, instead of breaking down prematurely, becoming objects for provision of hospital outlay, and frequently a burden to their friends. If treatment of disease is not attempted by the Health Department, except in cities where the control of municipal hospitals is placed within its jurisdiction, the sympathies of the medical profession will not be alienated. At the same time the private physician, will do well to fall in line with the growing sentiment, that prevention should occupy a more prominent position in the practice of his profession, for in the foundation of

health centres, and the establishment of the various clinics in connection therewith, considerable aid will of necessity result to the private practitioner.

I cannot resist making reference here to the total inadequacy both as to quality and quantity of the research work being carried on in connection with our Departments of Health. Sir James McKenzie in his famous work on heart affections has pointed out the opportunities of the general practitioner to carry out real investigation. It seems to me that his observations apply with equal force in regard to communicable diseases and that, if the wealth of material in relation to the incidence of these diseases now being absolutely unutilized could be sifted and properly analyzed, progress in the control of these diseases would be greatly facilitated.

The place of the voluntary agency in relation to the official Health Officer, I shall not attempt to touch upon. The question has afforded material for very considerable discussion and is still in most communities an unsettled controversy. My personal opinion is that if it were possible to accomplish a consolidation of effort and uniformity of purpose among the voluntary associations of which the number tends constantly to increase, resulting in dissipation of time, energy and funds, on the part of persons drawn principally from the same stratum of society, so that the whole problem of disease prevention could be surveyed by them in its entirety and effort not exclusively focused on special and often narrow fields, the net gain to the cause of Public Health would be very considerable indeed. I see no reason why all of these separate societies should not be welded into a large amalgamated organization, and become an effective auxiliary to the efficient Health Department.

That the Health Officer should confine himself to the exercise of his powers as a police official, I do not believe for a moment. Like the pilgrim in Bunyan's famous allegory, so long as he is burdened with the weight of this delusion he flounders in the Slough of Despond. The more time he spends on understanding the temperament of his community, and educating them to accept compulsion, the less excuse he finds for the employment of his punitive authority. I agree with Dr. Herb. Sinclair, that "it would be as easy to enforce compulsory circumcision or infant baptism as to enforce compulsory vaccination, though you can make it a crime to buy a stamp, a newspaper or an ice cream soda on Sunday." "To hear people talking about police regulations," says Dr.

Hastings, in his epigrammatic manner, "Is like ministers talking hell fire."

Neither do I believe the organization of our work in Preventive Medicine should proceed along half-hearted or haphazard lines. The salvage of human life transcends in importance all other considerations in the conduct of human affairs. The words of the Chief Health Officer of the Province in his review of ten years progress will be a foreword for future generations: "It is the paramount duty of every Government to protect the health of its citizens. Prevention of disease is by far the greatest field of modern medicine. It is not only the most economical but the most reasonable, successful and satisfactory plan of procedure in respect to disease."

System of Follow Up Work for Tuberculosis*

BY MISS ZADA KEIFER, *Supervisor, Hospital Extension and Tuberculosis Nursing Service, Department of Public Health, Toronto.*

TO understand the working of Toronto's Tuberculosis programme, it is necessary to know something of the general organization of the Division of Public Health Nursing in the Department of Public Health.

This is a municipal organization doing generalized Public Health Nursing for the City of Toronto. Some of the most prominent phases of the work are Prenatal, Child Welfare, School, Tuberculosis, Venereal Disease, health supervision of Licensed Baby and Maternity Homes, and Hospital Extension services, as well as many miscellaneous duties which come to the nurses in their capacity of city employees and much co-operative work demanded by various social agencies in the city.

The director of the division is responsible to the Medical Officer of Health for the conduct and efficiency of the Division. She has on her staff special supervisors who have been appointed to take charge of the various branches of the work. For purposes of administration the city has been divided into eight districts with a Superintendent in charge of each, having a staff of from ten to twelve nurses, according to the needs of her district. Each large district is again subdivided into small areas which are assigned to the individual nurse, who is responsible for every type of public health nursing services which may be required within her district.

In addition to the eight district offices there is a Central Office at the City Hall where the director and the special supervisors are located, also a group of twelve hospital extension nurses whose duties will be explained later.

The function of the special supervisor is that of formulating and standardizing the policies relating to her particular part of the work. She is also responsible for the education of the staff in her specialty and is expected to keep them posted as to developments elsewhere in her field of work.

The Hospital Extension service is composed of a group of twelve public health nurses attached to the various hospitals of the city.

*Read at the Ottawa Congress on Tuberculosis, March 17th, 1922.

These nurses act as the connecting link between the hospital in-patient or out-patient department and the nurse in whose district the patient's home is located. Just here I would like to emphasize the fact that in the matter of visiting, no two nurses' work overlaps. Any visit to be made to the home is made by the nurse in whose area the home is situated. The hospital nurse attends all clinics and visits the city order patients on the wards—and from these sources refers to the public health nurse in the district from which they come, all cases requiring instruction and follow up,—on the other hand, asks for reports when she wishes to have information for the physician which will assist him in the diagnosis and treatment of the case. Special return report forms are used in the various clinics, which cover in detail the information required by the physician and we feel that much more satisfactory results are obtained by getting this information from a nurse who has likely known the home and has been the one to send the patient to clinic or has arranged for the admission to hospital.

Working closely with the public health nurses, and relieving them of the burden of arrangements for relief or for social case work which forms such a big part of the problem of rehabilitation with many of our patients, are the secretaries of the Neighborhood Workers' Association. This organization is composed of the various charitable and relief-giving agencies of the city, who several years ago banded themselves together in an effort to co-ordinate all social work and prevent much of the waste and overlapping then existing. The Association has appointed one or more paid secretaries in each of the eight public health districts and it is to them the nurse turns for any relief which may be needed for her patient or for service in other social difficulties.

Unfailing support and co-operation is also given the nurses by the various other divisions of the department with whom our work brings us in constant touch.

We now come to a description of the tuberculosis work as carried on under the department. The Supervisor of Tuberculosis is also Supervisor of Hospital Extension Service and the twelve public health nurses attached to that staff. This arrangement seemed a reasonable one because two of the twelve nurses were attached to the Sanatoria to which Toronto patients are sent and doing special work in connection with tuberculosis clinics which, with one exception, are all part of the hospitals' out-patient services.

There are in Toronto eight clinics for the diagnosis and treatment of tuberculosis. To enumerate—one children's clinic at the

Hospital for Sick Children; five clinics, one at each of the adult hospitals, Toronto General, St. Michael's Western, Grace, and Women's College; the clinic at Gage Institute and the D.S.C.R. clinic at Christie Street Hospital. A nurse from the Hospital Extension Staff attends every clinic for tuberculosis held in the city with the exception of the D.S.C.R. clinic, and from this clinic all positive cases are reported to the Supervisor of Tuberculosis and referred by her to the various districts for supervision of the contacts in the home.

As stated previously the Hospital Extension nurses are in the hospitals all day and attend all clinics as far as possible. The nurses have been assigned to the various hospitals according to the need, some hospitals having three, others two, others one, public health nurse. In the Tuberculosis or Chest Clinic—as in none of the general clinics—our nurse assumes charge. This right has been given her by the hospitals which have practically, if not actually, handed over to the Department of Public Health, the management of the Tuberculosis clinics. This is true even at the Toronto General Hospital where we have no other responsibilities in the outpatient department, as they have their own social service nurses who take care of all other clinics.

The Chest Clinic physicians have their own Association, known as the Associated Chest Clinics and have worked out a method of procedure and a standard classification for tuberculosis cases. With the public health nurses in all hospitals tuberculosis clinics working under one supervisor, the results should be satisfactory, at least from the point of view of co-ordination and standardization.

In discussing our tuberculosis work it is well to outline first the various methods by which we find our patients.

1. Our most important source of information should be the private physician. Last year there were 937 notifications sent in to the department. While this seems a large number, we find that of the 228 deaths from Tuberculosis occurring inside the city during 1921, 145 or 65 per cent. of them had not previously been reported to the department. Deaths in Sanatoria were not included, as practically all of these are necessarily reported when application for Sanatorium care is made. Of the 937 notifications received, 588 were sent in by private physicians and 349 from clinics. We do feel, however, that we are receiving better co-operation from the private physician, than formerly.

2. Our second important source of information is the Tuberculosis or Chest Clinic. It is a comparatively simple matter to see

that notifications are sent in for all hospital clinic patients on whom a diagnosis of Tuberculosis has been made, as the public health nurse is present and can see that it is done. At the Gage Institute clinic also the matter is simple as the best possible co-operation exists. One of the two nurses doing special work in tuberculosis attends these clinics and is therefore able to assist in linking up the work in the district with these clinics. At the D.S.C.R. clinic, Christie Street, we have no nurse, but here, too, we have worked out a system of co-operation that is fairly satisfactory to us by which they notify us, through the D.S.C.R. headquarters, of all open cases. While they do not expect us, nor do we desire, to take responsibility for the patient himself, we are in this way enabled to visit the contacts in the home and arrange for their examination and supervision. A report is sent to the D.S.C.R. every four months on all patients under observation, covering the physical and social conditions of the contacts and information as to the patient's condition at the last visit. Special reports are also sent in from time to time if such seems necessary.

When we take into consideration the fact that there were 599 clinics for tuberculosis held in 1921, not including the Gage Institute and D.S.C.R. clinics, and that they had a total attendance of 6,998, we realize that an immense amount of work is being covered. In December there were 1,228 cases under supervision of the public health nurses. This figure does not include the contacts, for in our system of records these are classified with other medical cases and only as tuberculosis cases when a positive diagnosis has been made.

3 and 4. Applications for Sanitarium or hospital care at city expense brings another large number of patients to us, as do reports of positive sputum from the laboratories of the department. In both these cases, if no notification is received within a reasonable time from the attending physician, he is written to and asked to send in the usual notification.

5. Notices of deaths from tuberculosis are forwarded to the district offices so that the nurses may visit and arrange for examination of contacts, also for fumigation or cleaning as required.

6. In the public schools of the city every child is given a complete physical examination twice during his school life, in the first and fourth grades and may be seen at other times by the school medical officer, who visits the school at least once a week. In this way many suspect cases are found and referred to the private physician and by him frequently to the clinic for further diagnosis.

7. Many cases are also found in her district by the public health nurse, who has come to be recognized in the neighborhood as the one to whom every one tells their troubles. She may be visiting in the home for any of a great number of reasons and it is to her the worried mother will tell of the father's cough and loss of weight, the child who is listless and will not play, or her own cough that she can't seem to get rid of. Or, may be, it will be of a neighbor who should see a doctor but can't afford to go to one.

Whatever the source of our information all cases of tuberculosis coming to the attention of the department, are referred to the district in which the patient resides, and a record of all information given her is made by the nurse. Unless the doctor has advised to the contrary she visits in the home to make whatever arrangements are necessary so that the doctor's orders in regard to the patient may be carried out. She also endeavors to arrange for the examination of contacts.

If Sanatorium care is indicated the district nurse will advise as matter of routine, asks the district nurse to send her a detailed report on home conditions, if one has not already been sent in. This report includes living, working, and sleeping conditions, number and ages of children, financial resources, etc. The doctors have become accustomed to receiving this report and now insist on having it before making recommendations for treatment.

If Sanatorium care is indicated the district nurse will advise as to the clothing necessary, arrange for the care of children during the mother's absence, or for the support of the family in the event of its being the father and wage-earner who must go to the sanatorium. Difficult as it sometimes seems, all of these things are as a rule, satisfactorily accomplished through our co-operation with the social agencies more particularly with the Samaritan Club and the Heather Club Chapter of the I.O.D.E., whose function is to aid the needy tuberculosis patients or their families.

During the year 1921, about 700 city orders were issued for sanatorium care. The majority of these patients went to Muskoka Hospital for Consumptives at Gravenhurst, and Toronto Hospital for Consumptives at Weston; a few went to Queen Alexandra Sanatorium near London, Ont., and to St. Catharines Consumptive Sanatorium. This year we are also sending patients to Freeport.

Two of the nurses of the Hospital Extension Staff have been assigned to special work in connection with Tuberculosis. One nurse visits twice weekly at the Toronto Hospital for Consumptives, and the other goes to Muskoka during the first week of each month.

They interview all new patients who are being maintained there by the city, learning from them any need for adjustment of home conditions, or of other worries which may hinder treatment. To them the Superintendent turns when he wishes the patient transferred to some other institution for treatment which the Sanatorium does not provide, or for the necessary arrangement for homeless patients or deserted children who may be ready for discharge. These two nurses also visit the district offices weekly, talking over with the nurse the records of tuberculosis patients in her district, visiting with her on any difficult cases, and in a general way acting in an advisory capacity in problems arising out of cases under supervision.

At the request of the Associated Chest Clinicians, the department has prepared two forms as an aid in co-ordinating the work of the clinic and Sanatorium. The first of these forms is filled in by the physician at the clinic which the patient attends and forwarded through the Department to the Sanatorium. The form covers the diagnosis and classification, additional diagnosis, stage, anatomical and constitutional; febrile; maximum temperature, number of sputum tests and results; X-Ray findings; haemoptysis, and any other information which he can give.

On the discharge of all city order patients the superintendent of the Sanatorium has been asked to fill in and send to the department the second form. This gives in detail the address to which the patient is going, the date of discharge, address and date of admission; the dispensary or clinic at which previously treated, information as to condition during stay in Sanatorium, amount of exercise or work at time of discharge, reasons for discharge, and any recommendations which the superintendent may wish to make. Copies of this report are forwarded to the clinic or private physician who sent the patient to Sanatorium—also to the district nurse whose responsibility it is to see that patient returns to clinic or private physician for supervision. It is also her function to assist in making any adjustments in the home that will enable the patient to carry on as far as possible the Sanatorium routine.

Up to this point the discussion has been of the work that centres around the care and supervision of a tuberculous patient. This work is largely preventive as well as curative. There are other phases of the work that are more exclusively preventive in character and which are therefore of even more importance. Most of these are in relation to children and are closely associated with the chest clinic at the Hospital for Sick Children. This clinic is held

once a week on Wednesdays with a clinic on Saturday morning for the examination of I. C. tests and of children proceeding to Preventorium who are admitted only through this clinic. During 1921 there were 3,430 attendances.

It is quite usual to have from 60 to 80 children attend the Wednesday clinic. The reports from the district nurse which are sent in on all new cases are of assistance to the physician in making recommendations for treatment or care. All children who are definitely tuberculous are referred to the Queen Mary Sanatorium at Weston, where there is accommodation for children of all ages.

For the child who needs careful supervision in order that the infection which he has received may not have a chance to develop into clinical tuberculosis, the physician may recommend treatment at the I.O.D.E. Preventorium—an institution in North Toronto which accommodates children from infancy to 14 years of age. In the summer months, they may be sent for a month or longer to the Heather Club Pavilion, which is located in the grounds of the summer home of the Children's Hospital at Centre Island.

Again, if the child's condition and home surroundings would indicate it, he may be referred for care in one of the five open-air classes which have been established in the public and separate schools and where there is an average daily attendance of 150 children. In the summer months the two Forest Schools have accommodated 200 children and this year High Park is doubling its capacity so that we will be able to send 300 children to these schools this summer.

Milk is being given out in 35 Toronto schools to 7,000 children. In 18 of the schools it is being given on a medical basis, four of these are separate schools. The total number of children receiving milk in this way being about 1,000. Children who are ten per cent. or more underweight and who have had remedial defects corrected are chosen by the school medical officer to receive half a pint of milk in the morning and afternoon. In the public schools the children pay what they can and the deficit is made up by the Home and School Council, and in the separate schools by the Separate School Board. In the majority of schools the distribution started in the middle of November; since that time 42 children have attained normal weight. In the remaining 17 schools the milk is given on a general distribution basis, that is, every child who has the money to pay for it can have it. 6,000 children are receiving milk in this way.

All school children are taught the simple rules of health in the

classroom talks and Junior Health League classes conducted by the public health nurse and an effort is made to have at least one of the parents attend the physical examinations made by the school medical officer. At this time very good results are obtained by emphasizing the need for the correction of defects from which the child is suffering.

Through the medium of the monthly Bulletin of the Department, by special publications and newspaper articles, every effort is made to educate the people as to the benefits to be obtained from healthy living.

We believe, and who can deny, that a great deal has been done, that we have gone a long way in prevention of Tuberculosis. The tuberculosis death rate of Toronto citizens, including deaths in city and of Toronto patients in outside Sanatoria, has been practically reduced one-half in the last ten years; the actual figures being 124 per 100,000 of the population in 1911 and 65 in 1921, which is the lowest rate for any large city. But when we study an analysis which has just been made of the 228 deaths in Toronto in 1921, and find that 33 or 14.4% occurred among children under 10 years of age, we realize that we have yet a long way to go in saving the lives of other little ones, for we know now that all of these children could and should have been saved. It is only by the untiring efforts of all who are interested in this work and by the continued goodwill and support of the community at large that this can be accomplished.

Drosophilids in Milk

E. A. BRUCE, Agassiz, B.C.,

DROSOPHILIDS are small flies, commonly called Pomace, Vinegar, Fruit or Sour Flies, that seem to prefer decaying or fermenting fruits, etc., or sour substance. Their puparia resemble hay or grass seeds when seen adhering to the inside of a milk bottle. The duration of life for the genus *Drosophila* at living room temperature is given as being two days for the egg period, six for the larval, and five for the pupal. In view of the fact that they have only been reported twice as occurring in milk, their presence upon five occasions in bottles of milk in the City of Vancouver, B.C., is of interest. The only American record is by W. A. Riley in an article entitled "Drosophila in Bottled Certified Milk" in the *Seventeenth Report State Entomologist of Minnesota*, 1918, pp. 41-45. Riley states that the only other reference to this fly in public health literature is to be found in *Zeitschr. f. Fleish v. Milchhygiene*, 1913, vol. 23, pp. 252-253, by Otto Fettick, who considers that milk infected in this way "must be regarded as questionable from a hygienic point of view."

Late in September, 1920, a milk bottle was received from the Vancouver Health Department, this bottle contained eleven pupae that were quite firmly fixed to the glass; after being kept three days six small flies emerged. Flies and pupae were sent to Mr. R. C. Treherne of the Entomological Branch, who kindly identified them as belonging to the genus *Drosophila*. Later these were sent to Ottawa, but no report has yet been received as to their specific determination.

The pupae, so far as I was able to judge, corresponded with those described by Riley. The puparium is of a light straw colour, about 3 mm. in length by 0.8 mm. in width, strongly convex on the dorsal surface, but slightly so on the ventral surface. The pharyngeal skeleton of the larvae is retained as a conspicuous black mass near the anterior end of the puparium. The dorso-cephalic region is flattened, and from it project two digitate pupal spiracles. The basal portion of these processes measures about 200 microns in length by 50 microns in width, and bears 11 filiform processes

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measuring up to 300 microns in length. These filiform processes were difficult to remove intact as they adhered strongly to the glass.

I am indebted to Mr. R. H. Meek, Chief Food Inspector for Vancouver, for the following particulars:

Case No. 1, March, 1919.

The first case of the kind occurred in some milk bottles which were being returned to the dairy from a summer residence on Burrard Inlet, and under a high power pocket lens were seen to contain the larvae of some insect. The bottles were usually left on the slip so that the dairy boat could leave new milk and collect the empty bottles. It was thought that the particular bottles must have been left for a few days on the slip to permit the egg deposit (as at the time it was thought that they might be the larvae of a small black sand fly so numerous up the Inlet).

Case No. 2, November, 1919.

A report of peculiar conditions being noted in a milk bottle—no information obtainable as to where the bottle came from—the milk was mixed supply.

Case No. 3, February, 1920.

A complaint re insects in milk. General and specific inspection of dairy made. No apparent cause. Remained unsolved.

Case No. 4, September, 1920.

A complaint made by a lady that some hay seeds in the milk bottle were not inviting, and on inspection appeared to be the same larvae as in previous cases.

Case No. 5, September, 1920.

A business man of Vancouver, feeling very hostile (for he was feeding his infant child on milk as purchased from the dairy), placed the bottle in front of us and demanded to know what kind of milk was permitted to be sold in the city. Examination of the specks in the bottle gave the appearance of being similar to previous specimens we had seen, however, seeing that this was the fifth complaint we decided to appeal to your Department for help.

In this case the milk was delivered from the V— Dairy, and was special milk bottled at the farm of J. M. S. Inspection of the dairy revealed nothing out of the ordinary.

Cases 3 and 5 were from the same dairy. Cases 1 and 5 were

similar, insofar as surroundings were concerned, both coming from areas outside the city where the black fly was common, and in both cases the bottles were brought into the city from such areas. Cases 2, 3 and 4 could not be traced beyond the dairy. All the cases except one (No. 5) were seen in bottles containing pasteurized milk. All cases occurred in the spring and fall of the year.

None of the Vancouver dairies were handling Bulgarian culture, but two of them were manufacturing buttermilk by inoculating skimmed milk with a bacterial culture obtained from U. S. A. points.

Mr. Meek states that the pupae were usually observed to be in pairs and close together, and that the area within the bottle occupied by the pupae was that part just below the neck to within a couple of inches of the bottom, and within a given area of one side of the bottle.

The fact that pupae were usually found some distance from the bottom is suggestive of a small quantity of sour milk having been left in the bottle, on the other hand *Drosophilids* are strongly heliotropic and would not be likely to deposit eggs on the bottom of a bottle (unless lying on its side). The fact that these flies will follow the light when a bottle is turned around, explains why the pupae are generally found within a given area on one side. In Vancouver milk bottles are handled in such a manner that it seems remarkable that the pupae in question escaped destruction. In washing bottles an alkaline solution consisting of 10% by weight of "Wyandotte" soda is used; at one time it was found that the dairies were economizing on the soda that this practice was stopped. The bottles first enter a cold bath, then a warm bath, and thirdly a bath the temperature of which is 160 to 165 degrees F. They are then rinsed in hot water, and allowed to dry by the heat left in the glass, which is almost too hot to be borne by bare hands. The condition was combatted by a more careful inspection of dairies and by exercising greater care in watching the bottles before they were filled; the dairymen realizing that a repetition of the trouble might lead to unsought advertising via the courts.

No further reports as to the presence of *Drosophilids* in milk have been received.

The Ontario Health Officers' Association

IF ever there was a live conference held in Toronto it was the recent Annual Meeting of the Ontario Health Officers' Association. There is no longer any "valley of dry bones" in connection with that organization. It fairly bubbles out with enthusiasm and the health vista of the future is one of assurance, of confidence and of hope. It was a pleasure to attend the meetings and hear the discussions so ably presided over by Dr. W. J. Shaw of Clinton. Dr. Shaw has got the twentieth century viewpoint. He wants something done. He is not content with a mere rehash of foibles, failings and shortcomings in public health work. He insists on finding a solution. "I have heard this same list of adversities, of barriers to be crossed, for years and years. Nothing, or next to nothing has been done to remedy them, but now they must be remedied." That is the way to talk. When Medical Officers of Health say "must" they mean business, and they have the Public Health Act at their backs.

Dr. F. J. Farley, of Trenton, President of the Ontario Medical Association, delivered one of the most forceful addresses one could wish to hear. He maintained that the necessity for Public Health work was so obvious that public opinion should not tolerate any government in power that would not endorse and carry out a public health program that would tend to insure the happiness, health and welfare of the people.

Other important recommendations Dr. Farley made were the establishment of county laboratories for the country physicians, the appointment of properly trained, whole time county medical health officers, and community nurses.

Dr. Roberts, M.O.H., of Hamilton, advocated a similar scheme for health districts of from 20 to 25 thousand people.

Dr. J. A. Morgan, of Smith Township. Peterborough, gave an interesting paper on "How to Control Diphtheria in a small Country Village," stressing the fact that diphtheria is one of the chief causes of children's deaths in a community, and that the free use of swabs and antitoxin, coupled with the services of the community nurse are the best methods for its control.

A most interesting address on "Food Poisoning" was given by Dr. M. J. Rosenqu, Professor of Medicine and Hygiene of Harvard University, author of the standard text-book "Preventive Medicine

and Hygiene", and one of the most outstanding authorities on Public Health subjects on the continent.

Dr. H. W. Hill, of London, Ontario, gave an address on "Some Modern Fallacies" emphasizing the point that public health work is more concerned with the prevention of disease than its cure.

Dr. W. W. Lailey, of Toronto, read a paper on "Pre-natal Care."

Dr. C. J. O. Hastings, M.O.H., Toronto, gave an address on "More Efficient Care of Mothers, and Expectant Mothers before, during and after Confinement."

The morning session of the second day was entirely taken up with a discussion on milk and its prominence as a food indispensable both to the adult and the child.

According to Mr. E. H. Stonehouse, President of the National Dairy Council, who delivered the first address in the morning, on the subject of "How to Produce a Clean and Safe Milk Supply," some of the conditions throughout the province are very bad. "If I were dictator," Mr. Stonehouse declared, "I would pass a Dominion law to-morrow, if that were possible, for the compulsory pasteurization of milk in every city, town and village. When we reach the point after years of education, when we can get good, practically certified milk, then and then only can we dispense with pasteurization."

Dr. Roberts, Medical Officer of Health, of Hamilton, pleaded for the laboratory diagnosis of milk. Twenty-five per cent. of all the cases of surgical tuberculosis are caused from the bovine tubercular organisms that the human being obtains from milk," he said.

Mr. Alex. White, Chief Sanitary Inspector of the Province, advocated the appointment by the Government of three trained milk specialists who could approach the question from the dairymen's standpoint.

Several doctors and inspectors from various parts of the province, including Galt, Brantford and Ottawa, maintained that the most important question of all was the condition of the herds. One suggestion offered was that each municipality should have complete control of the milk supply.

"Municipal Control of Milk Supply" was the topic of an address by Dr. Grant Fleming, Deputy Medical Officer of Health, Toronto. The inspection of farms and the education of the farmers, having as inspectors veterinary graduates, and the inspection of all equipment used in producing and delivering the milk, and in the process of pasteurization were absolutely necessary according to Dr. Fleming.

Topics of a more general nature formed the program of the afternoon. Dr. Colin Campbell, of Toronto, gave some alarming statistics in regard to the frequency of "Squint" or cross-eye, among children. If taken in time, before the age of five or six years, there should be no difficulty in total cure. The trouble arose when a cure was attempted by a person other than one possessing general medical knowledge. In many cases, the doctor stated, children were apparently freed from the trouble, and the eye seemed perfectly normal, when as a matter of fact, the child would be almost entirely blind in the one eye.

"The pity is," he declared, "that all of it is preventible. No time should be lost in stopping the practice of having children under five years of age examined for glasses, by anyone other than a careful medical practitioner." Dr. Campbell suggested that the Health Officers' Association, as a body, endorse a resolution to that effect. It is expected that the committee will consider the matter and report to the Association at its next meeting.

A paper by Mr. F. A. Dallyn, C.E., on "Soil Pollution," in which the need of extreme care in the placing of a well was emphasized, and a description by Dr. P. O. Coulombe, M.O.H., of the work carried on by the Health Department in Sturgeon Falls, with which he is associated, concluded the conference.

The Venereal Disease Problem

BY DR. GORDON BATES.

VENEREAL diseases constitute the greatest single public health problem of modern times. Foul and sinister manifestations of our failure to attend to the organized study and care of our growing young people, their devastating influence is more marked than that of war itself. The product of social conditions which can be easily remedied if we would put first things first, these diseases are significant in that their end results are not only disability and death, but far reaching social results which affect social organization and human happiness in a way characteristic of no other diseases.

The fact that venereal diseases are an index of the immorality of a community, that they are the common result of a misdirection of the efforts of nature to ensure the carrying on of the race—the fact that with unerring precision their very existence points to widespread departure from the ideals which should actuate men and women in their responsibility to one another and in their joint responsibility to the race—this means that in attempting to solve the disease problem we must also tackle social organization as well. It is not enough to set up clinics for the cure of disease, important though that action is. The definite training of children not only that they may be an economic success but that they may be guided towards ideals which will mean a correct attitude towards life, and towards one another is necessary. This will mean in the long run not only citizens who are longer lived and who are free from disease but contented, happy units in a well balanced state.

Not only the hospital, the insane asylum and the cemetery are strewn with the debris of these terrible diseases, but in the domestic relations court, the divorce court and the jail we find significant and costly evidence of their far reaching results. To correct definite defects in our educational ideals and our educational system, to definitely improve our community organization at the same time as we attack the disease problem direct will mean success of an

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amazing character. In instituting reforms which in themselves are fundamental we will diminish disease and at the same time do much for the present happiness of young people as well as ensuring for the future, happiness which may be so marred if they be caught in the net in which so many of them will be enmeshed if present conditions continue.

Venereal Diseases are widespread and damaging. The British Royal Commission bringing in its report in 1916 stated that no less than 10 per cent. of the urban population of Great Britain was infected with syphilis alone and that Gonorrhoea is several times more prevalent than syphilis. The resulting disease problem was shown to be extremely costly. The results of the investigation carried out in Great Britain was found to be applicable to other countries, although the significance of the problem had not been noticed previously. This was very largely due to the fact that death from these diseases appeared in the Registrar General's Report as due to some end results which had appeared previously to be a disease in itself, not merely a late stage of Syphilis or Gonorrhoea.

The direct expense of venereal diseases to the community is enormous. One investigator states that general paralysis of the insane (a late stage of Syphilis) alone costs the United States \$467,000,000 yearly. It is certainly true that Venereal Diseases provide the most startling example of the fact that wealthy men and governments expend millions of money annually for diseases which should never be permitted to exist. Much of the money expended on costly hospital wards should be expended in prevention. In Venereal Diseases we should attempt to get all cases developing under treatment as quickly as possible in order that cure may be effected quickly and spread prevented. Then we should attempt social organization on a large scale.

In the establishment of fifty Venereal Disease Clinics in Canada and in the passing of the legislation compelling treatment Dominion and Provincial Governments are doing a great deal. What is badly needed, however, is the growth of a great popular social hygiene movement—in the direction of studying, preaching and establishing a more normal environment, particularly for young people.

The Canadian National Council for Combating Venereal Diseases is the voluntary organization entrusted with the organization of this work. The name of this organization will be changed to Canadian Social Hygiene Council to bring it into line with a similar change already made by many of the Council's' branches and an

energetic campaign entered into in all parts of the country in an endeavor to correct certain specific defects as rapidly as possible.

There are two major Venereal Diseases, Gonorrhoea and Syphilis, in addition to the minor local disease, Chancroid. It is supposed that Gonorrhoea has existed for several thousand years. In the Brugsch papyrus attributed to the year 1350 B.C., according to Stokes, there appear among the remnants of an Egyptian system of medical practice reference to symptoms and treatment which would seem almost certainly to apply to Gonorrhoea. References to a disease which was probably Gonorrhoea appear in many historical documents and in the Bible.

Syphilis, on the other hand, is generally believed to have sprung to light in comparatively modern times and the idea that it first appeared in Europe in 1493, having been brought back from Hayti by the soldiers of Columbus is commonly accepted. Whether this is true or not, certainly shortly after this time it took on the characteristics of an epidemic in Europe. Starting in Spain it became known as Spanish Disease—then appearing in France, it assumed the name of French Pox. Carried to Italy by the armies of Charles IX., it became known as Neapolitan Disease, while in England, after its spread to that country, it was spoken of as Great-pox in contradistinction to small-pox.

In the late 18th century the famous John Hunter inoculated himself with pus from a patient with Gonorrhoea. The patient, unfortunately, also had Syphilis, and the investigator developed Syphilis as a result of his experiment. He thus came to believe the two diseases to be identical, and because of the weight which his opinion carried, this continued to be generally believed until further investigation toward the end of the 18th century cleared the matter up. The next outstanding discovery in connection with Gonorrhoea was the identification of the gonococcus, the true cause of Gonorrhoea, by Neisser in 1879.

Outstanding events in the development of our knowledge of Syphilis have been the discovery of the "*spirochaeta pallida*" the cause of Syphilis by Schaudinn in 1905, the development of the complement fixation reaction by Bordet and Gengou, followed by the Wassermann reaction for the diagnosis of Syphilis by Wassermann in 1904, and finally, the discovery of Salvarsan or "606" by Ehrlich and Hata.

The enlistment of public interest and government support of treatment and prevention have rapidly followed investigations carried out in various parts of the world. An epochal event was the

Report of the British Royal Commission brought out in 1916, while the information brought to light as a result of the war and routine examination of soldiers in the army were equally important in that they revealed an enormous amount of Venereal Disease, most of which had been contracted while the soldiers were still civilians.

In Canada as a result of advancing public opinion stimulation of the work of several voluntary committees, particularly the Advisory Committee on Venereal Diseases of Military District No. 2, the Dominion Government in 1919 called a conference of persons from all over Canada to discuss plans for fighting Venereal Diseases. As a result of this meeting the Government decided to subsidize the provinces to the extent of \$200,000. This subsidy has been met by an equal contribution on the part of the provinces so that in the first year of the campaign against Venereal Diseases \$400,000 was spent. Venereal Disease clinics have been organized in practically all of the provinces, and thousands of patients have been brought under treatment.

At the Ottawa Conference another important step was the formation of the Canadian National Council for Combating Venereal Diseases, a voluntary organization with branches in all of the provinces and a number of cities, whose purpose is to assist the Government by organized propaganda and education as well as by undertaking pioneer work in the direction of investigation and solution of fundamental allied social problems.

DISTRIBUTION.

Venereal Diseases are practically world-wide in their distribution, and although it is supposed that in cities they are more prevalent, they are found in every part of the community. In an investigation of 386 cases carried out in Toronto in 1917 it was found that the sources of infection were not only in all parts of the continent but came from foreign countries as well. Many of the cases originated in rural parts of Ontario. They were cases from most of the Canadian Provinces, from many states of the United States and from Europe, Africa and South America. As follows:—

England	13	Hamilton	17
Scotland	1	Brantford	3
France	1	Owen Sound	2
Toronto	199	Grimsby	3

St. Catharines	4	Detroit	7
Angus	2	S. Newark, Conn.	1
Sault Ste. Marie	2	Newark	2
Barrie	3	Cleveland	2
London	3	Memphis, Tenn.	2
Lindsay	1	Emporium, Tenn.	1
Lisle	1	Waterbury, Conn.	1
Belleville	1	Pittsburg	2
St. Thomas	1	Philadelphia	1
Midland	1	Indiana	1
Kitchener	1	Penn Grove, N.J.	1
Orillia	1	S. Carolina	1
Whitby	1	Houston, Texas	1
Dunnville	1	San Antonio	5
Coldwater	1	Trenton, N.J.	1
Rama	1	Boston	3
Windsor	1	Chester, Pa.	2
Southville	1	California	1
York Mills	1	Texas	1
Dundas	1	Kincardine	1
Burlington	1	Montreal	14
Quebec	1	Vancouver	3
Winnipeg	6	Halifax	4
St. John, N.B.	1	Hull, P.Q.	2
New York State	1	Sherbrooke	2
Buffalo	14	Ft. Lawson, Texas	1
New York	11	Cuba	1
Chicago	10	Rio de Janeiro	1
Milwaukee	1	Jamaica	1
United States	1	Cape Town, S. A.	1
American Sault	2	Aleandria, E.	1
Ontario			256
Other parts of Canada			33
British Isles			15
United States			77
Other countries			5

ECONOMIC AND SOCIAL RESULTS.

"Most of the evidence bearing upon the economic cost of Syphilis is buried among the statistics of insane hospitals and

pauper institutions. Only occasional glimpses can be had, which indicate the enormous wastage which they cause. Williams estimated, it will be recalled, that ten men insane from Syphilis represented a net loss of life expectancy of \$212,248 in earning capacity, and a cost to the State of Massachusetts of \$39,312. According to the census of 1910 there were 180,000 insane persons in the United States. Estimating 12 per cent. of insanity to be due to Syphilis and the experience of Massachusetts to be applicable to the country as a whole, the economic loss in earning capacity and cost of care on the score of a single item in the total bill of only of the genital infections, would approximate \$467,000,000. If paresis, a relatively uncommon complication of Syphilis, can alone cost more than half a billion dollars, the cost of illness and death from other and equally grave complications, such as heart and kidney diseases, blindness, deafness, paralysis due to nervous change, when added altogether, will total figures that take rank beside the stupendous costs of war. There are estimates of the cost of consequences. The wastage of money spent on ineffective treatment, on the maintenance of hospitals and dispensaries, on medical fees, and through reduction of efficiency without absolute crippling and death, is beyond the reach of comprehension."*

The cost of caring for the end-results of Gonorrhoea is also very great; an outstanding example of this is the tremendous number of gynaecological operations upon women for ailments which are late complications of Gonorrhoeal infections.

SOCIAL RESULTS.

The results of Venereal Disease from a social point of view are also an outstanding part of the problem. One may take as example General Paralysis of the Insane. This disease caused by Syphilis is a form of insanity which is loathsome in character and practically always fatal. It commonly comes on in males at about the age of forty. The patient is frequently a married man with a wife and family. These left behind may themselves be infected and below par mentally and physically. Often they, too, become charges on the community. Delinquency and crime, as well as dependency result, and in this way the Government pays the second time unnecessarily for the upkeep of the police court, the jail and the reformatory. Stokes in "Today's World Problem of Disease Prevention" quotes Williams, who states, for example, that in an inves-

*Stokes' "To-day's World Problem in Disease Prevention."

tigation of 100 men dying in Massachusetts of Syphilis insanity. 78 women and 109 children were thrown upon society without the protection of a wage earner.

Syphilis is said to cut short the duration of life about one-third. This elimination from the community of a large number of persons who would otherwise continue to be producers for a number of years provides a serious economic and social problem both for the State and the dependents and relatives of those who die.

The fact that Syphilis and Gonorrhoea are the greatest human sterilizers both in the male and the female has a serious result in the birth rate. Dr. Salebee, the well known English Eugenist, has stated recently that Syphilis is the greatest single cause of infant mortality and certainly the enormous number of miscarriages, still births and infant deaths arising from syphilitic infection in parents should be a potent factor in arousing public opinion in the direction of a campaign of prevention. The relation between such a campaign and a child welfare campaign, including an agitation for the establishment of pre-natal clinics where pregnant mothers may be examined and cared for, is sufficiently obvious.

THE SOCIAL BACKGROUND.

While it is true that an enormous amount of Venereal Disease is acquired innocently, particularly by the blameless wife and child, it is also true that the social phenomenon of prostitution and the existence of illicit sexual intercourse are very largely responsible for the existence of Venereal Diseases in the community at large. A study of this part of the problem is essential if any adequate measures are to be worked out for the ultimate control of conditions as they are at present.

In Europe and in other parts of this continent the Red Light District, a section of the community in which prostitutes are segregated with the tacit consent of the community and sometimes legal sanction, constitutes a definite problem, while in all parts of the world the problem of the clandestine prostitute and of widespread immorality on the part of individuals of both sexes is a matter which must be studied and dealt with. It is still believed by many persons that the only method of controlling vice and resultant Venereal Disease is by the establishment of a district for prostitutes. A medical examination of the prostitutes is supposed to be sufficient to insure the safety of their patrons. This theory is not now believed in or approved of by workers in the social hygiene field. It is believed that the segregated district is a direct encouragement

for immorality, that it lowers the moral tone of a community and of the members of the community, and that it increases the number of exposures to infections. It does not cut down the amount of clandestine prostitution in the surrounding community as has been argued, but increased it. The women in such a district are not free from infection and the medical examinations which are conducted from time to time are always a farce. Such women always become infected with Syphilis or Gonorrhoea sooner or later, and are notorious conveyors of disease. Repeated surveys of the situation in various cities have proven this fact again and again. Papee showed that 30 per cent. of the prostitutes in a typical city (Lemberg) were in the first to third year of a syphilitic infection—that is the most contagious period. Similar surveys in American cities have had a like result.

In a typical Canadian reformatory for women examination showed that about 33 per cent. had Syphilis and 80 per cent. Gonorrhoea. These women were largely of the prostitute class.

The situation in Canada as regards prostitution differs in various parts of the country. Not long ago there were some Red Light Districts in the West. There is still some public opinion in favor of the establishment of such districts as a preventive measure. In Montreal there is still an extensive and notorious vice district, perhaps the worst, still remaining on the continent. In the United States, during the war, a determined effort was made to wipe out all such districts, and as a result nearly three hundred were put out of commission.

Side by side with the problem of the commercialized and regulated prostitute there is always that of the clandestine who may or may not be paid. As I have already suggested the presence of a vice district usually means the number of clandestines is increased, not decreased.

The situation in Toronto is probably applicable to most Canadian cities. Here the police have adopted a policy of repression, with the result that we have to deal almost altogether with the problems of clandestine immorality. The method of investigation by means of the social case sheet has been of great value in revealing social conditions surrounding Venereal infections in this city.

In one investigation carried on among army patients in Toronto 417 men were closely questioned with the following results:—

36 men were married.

263 men were single.

70 were under twenty.

144 were between twenty and twenty-five.

31 were over thirty.

Of the women who had been sources of infection:

213 were single.

27 were married.

10 widowed.

2 were divorced.

As to age:

45 were over 25.

32 were under 18.

29 were 18.

268 were between 18 and 25.

PAYMENT.

127 of these women were not paid.

151 men had money payments varying from 75c. to \$15, \$2.00 usually.

55 men provided a meal.

5 made presents of clothing or other articles.

Others provided entertainment at a movie or a theatre.

The automobile was frequently an auxiliary factor.

Quite commonly the infected man met the girl accidentally, had never seen her before and never saw her again.

SOCIAL CONDITION AND OCCUPATION OF WOMEN.

44 women were definitely classified as prostitutes, often living in houses of prostitution. This condition of affairs was confined to certain cities. In Montreal this was usually the case. In three cases it was true of Toronto, and in one of Hamilton.

12 were munition workers.

9 were factory workers.

13 were stenographers or clerks.

41 were domestics or waitresses.

Other gainful occupations were boarding-house keepers, actresses, salesladies, theatre ushers, cabaret singers, mica splitter, manicurist, bookkeeper. It was found in a later investigation of 1,000 cases that alcohol seemed to be one of the casual factors.

PLACES OF INFECTION.

Men were questioned as to where infection had taken place.

Aside from cases in which infection took place in disorderly houses, facts were ascertained which seemed to point to the necessity for supervision of boarding-houses and hotels.

In 60 cases infection took place in the girl's own boarding-house.

In 21 cases in a hotel where the couple registered as man and wife.

In 38 cases they went to strange boarding-houses, obtained rooms and stayed for a few hours.

A large number of infections took place in the city parks. 21 in High Park and 11 in Queen's Park alone.

The above statistics are of interest in that they reveal conditions and point to the desirability of certain definite reforms.

Among women who can be definitely classed as prostitutes undoubtedly a large portion are feeble-minded. Indeed estimates as high as 60 per cent. have been made. Although the majority of immoral persons are not feeble-minded the feeble-minded prostitute is so dangerous a type, so devoid of responsibility and such a spreader of disease that she constitutes an important part of the general social hygiene question. This type of prostitute should be dealt with rigorously.

A campaign against Venereal Diseases must be comprehensive in character and certain points must be borne in mind as to existing conditions.

These may be summarized as follows:—

1. There are a large number of infected and infective persons, a large proportion of them ignorant of their condition. These persons both for their own sakes and the sake of others whom they may infect should be educated and persuaded to take treatment.

2. The large proportion of the population is as yet uninfected. Many of them may become infected unless steps are taken. This resolves itself largely into a problem having to do with the care and education of young people.

Class 1—Infected Individuals.

(a) Treatment.

For the care of infected persons there are provided, first, the private physicians; secondly, the Government clinic. Clinics are now in operation in practically all of the provinces of Canada.

(b) Education.

Education for the benefit of infected persons has been undertaken by Governments in various provinces and by the Canadian

National Council for Combating Venereal Diseases. By the use of newspaper advertisements, moving-pictures, such as THE END OF THE ROAD, lectures given before various groups of the population and the distribution of literature, infected persons or persons who have exposed themselves to infection may be informed of the necessity for undertaking treatment at the earliest possible moment.

(c) *Value of Social Service Department.*

The Social Service Department of a Venereal Disease Clinic is extremely important and through this department the clinic may become a much more valuable unit in the general campaign against venereal disease. One of the useful functions of this department is education of the patient in order that he may see the importance of continuing his treatment and in order that he may not be a menace to other people. This may be accomplished in various ways. For instance, educational material in the form of pamphlets or cards should be placed in the hands of every patient. The matter of using good educational posters in clinics is also worthy of consideration.

Follow-up work in the cases of patients who neglect treatment is important. Patients may in some cases be persuaded to resume treatment by means of appropriate letters. In other cases it may be necessary to follow patients to their homes. The fact should be emphasized, however, that the better the educational work carried on in the clinic the less follow-up should be necessary. Where personal follow-up work is necessary, the greatest tact is desirable when questioning is necessary at a patient's own home. It is perhaps scarcely necessary to mention in passing the fact that a well organized card index system is essential if social service department is to keep track of patients visiting the clinic and of visits missed.

(d) *Value of the Social Case Sheet.*

The All-America Conference on Venereal Diseases held in Washington in December, 1920, passed certain resolutions as to the value of the social case sheet. These stated that information gathered by means of the social case sheet may be utilized for the following purposes:

- (a) follow-up work.
- (b) tracing source of infection.
- (c) tracing contacts.
- (d) estimating the value of educational methods in vogue as a part of the local campaign.

- (e) demonstrating economic loss to various industrial and other units in the community.
- (f) demonstrating the social needs of the community; e.g., recreational needs, adequate supply of supervised boarding-houses, improved industrial conditions, etc.
- (g) demonstrating of distribution of infections.
- (h) demonstrating type of prostitution, extent of solicitation, etc.
- (i) demonstrating medical and social results of venereal diseases.

The above summary of types of information which may be gathered by means of the social case sheet gives one a fair conception of its value and it is important that in utilizing this document in investigating Venereal Disease cases the fact be borne in mind that the information obtained from each case is of definite value not only in so far as the case being investigated is concerned but for the community.

It is important that the name and address of the source of infection be obtained in order that steps may be taken to find that person and put him or her under treatment—using the legal machinery provided under legislation for the prevention of Venereal Diseases if necessary.

It is also important that any contacts or persons who may have been exposed to infection from the patient be discovered and their cases investigated. One should find out whether such person is actually infected. If infected they should be persuaded to take treatment. The social case sheet may also be used for investigation of various problems which have to do with Venereal Diseases. Through it one may find out, for instance, in what parts of the country a great deal of infection exists. One may investigate the relation of lack of recreation to immorality, one may estimate the amount of prostitution going on in a city, one may ascertain the existence of houses of prostitution or houses of assignation in a particular area or discover the necessity for better lighting in parks. As a matter of fact through the judicious use of the social case sheet one may arrive at a valuable conception of the problem of immorality, prostitution and Venereal Diseases in any community.

All of the above means that every venereal case should be investigated by means of the social case sheet and that in every investigation there be the utmost accuracy. Generally speaking a

male physician should question male patients—the social worker female patients.

By the use of a similar type of investigation among individuals brought up in police courts or imprisoned in jails or reformatories for sex offences, one may arrive at an idea as to whether legislation is adequate and as to whether the idea of the legal authorities is merely punishment of the individual or prevention.

Class 2.—Non-Infected Section of the Population.

(a) Education of Children.

One of the great factors in producing the immorality which is at the back of the Venereal Disease problem is the fact that generally speaking children are allowed to grow up in absolute ignorance of matters of sex and as to the necessity for living a decent moral life. This is very largely due to the fact that parents are uneducated on these matters and unable to educate their children. It is not implied in advocating the teaching of the biology of sex that this alone will provide anything like an adequate protection of young people. It is necessary, however, that children be given some idea of the great purposes of nature and be taught a definite respect for the sex function. Part of such teaching should be definite instruction in citizenship and the stimulation of a spirit of chivalry and idealism which can easily be brought to the surface in any child by carefully planned educational measures.

The method by which such information should be given to children has long been a subject of controversy. It is now generally agreed that the parent is the proper person to teach children such matters. This has resulted in the adoption by the National Council for Combating Venereal Diseases in Great Britain of a plan for teaching classes of parents in schools in order that they in turn may undertake to teach their children. The moving-picture may be utilized for this purpose and there are already a number of useful films on the market. One entitled "HOW LIFE BEGINS," is very good. In imparting information to classes of parents it is important that if possible the general matter of the prevention of Venereal Diseases in its broader aspects as outlined below be brought to their attention with special reference to the supervision and general care of children as well as their education.

The desirability of normal healthy recreation for all children is a matter upon which special emphasis should be laid.

(b) *Adults.*

It is important that the adult population should have information on the Venereal Disease problem both on its seriousness and on methods which may be undertaken for preventing Venereal Diseases. Such education is important because it means the formation of public opinion and the public only arrive at a clear cut opinion when clear cut facts are placed before them.

THE DOUBLE STANDARD OF MORALITY.

It is an undoubted fact that society in the past has been prone to visit vengeance on the immoral woman and at the same time excuse moral lapses in the male. This means that condition of affairs has existed which is not only unfair but actually conducive to immorality. If sexual offences are wrong in woman they are equally wrong in man, and if punishment is to be meted out for such offences it should be shared by all offenders regardless of sex. The prostitute is frequently roughly treated by the legal authorities. The jail and reformatory are considered necessary for her reclamation. At the same time her male companion—equally guilty—goes free. The same condition obtains in the drawing-room. Too commonly the man of loose morals is welcomed as at least little worse than his fellow who has maintained the highest moral standard. At the same time the woman of easy virtue is shunned. All of this represents a state of opinion which is unhealthy and productive of very bad results. Until people generally come to believe in the single standard of morals progress towards the final elimination of Venereal Disease from the community will be seriously impeded.

One of the outstanding causes for the existence of immorality and Venereal Disease is late marriage. Marriage is commonly postponed because of economic and social conditions which would seem to make reasonably early marriage impossible. The public should be educated on this matter and the dangers of late marriage explained to them. The economic and social conditions which make for late marriage are definitely remediable. Only an educated public opinion will remedy them.

Another important cause of immorality is the lack of opportunity for healthy recreation. This applies to both children and adults. There would seem to be many possible methods by which existing conditions could be remedied. The schools are as a rule, for instance, not in use at night. Their utilization after school hours for dramatic entertainments, folk dancing, debates, etc.,

would be a means whereby children might be under supervision at a period of the day during which many of them may otherwise receive impressions of a dangerous character from associates of a type which are always too frequent. The utilization of church buildings for dancing by young people would mean that young people could indulge in a perfectly innocent and proper pastime under proper conditions. The general stimulation of all forms of outdoor recreation and sport is also important.

Side by side with problems involving the provision of more recreation is that of supervising existing forms of recreation. Undoubtedly the unsupervised dance hall is frequently a focus of immorality. This is not due to the fact that dancing is improper but to the fact that the dance hall is used for more than its legitimate purpose. If proper supervision is undertaken there is no reason why a dance hall should be used as a pick-up place nor is there any reason for improper types of dancing.

Housing conditions have a good deal to do with the existence of vice in any community. The crowding of several families into a house intended for one family produces conditions which do not make for normal family life nor for morality. Again lack of supervision of boarding-houses may result in dangerous developments. Unfortunately all boarding-house keepers are not scrupulous and the use of boarding-houses as houses of assignation is fairly common as a result. Licensing of boarding-houses on condition that they live up to certain requirements would be a valuable step in advance. One requirement should be the provision of a common room where roomers may receive their guests. The lack of such provision and the receiving of guests in bed-rooms is a frequent cause of trouble. In large boarding-houses for young men or young women definite provision should be made for recreational facilities and for proper entertainment for guests of both sexes.

In public discussion of the general subject it is necessary that great emphasis should be put on the function of the family as the most important social unit. If a member of a family breaks away from normal family associations and leaves home it is necessary that the community should recognize the fact that such person away from parental supervision and family care should have special attention on the part of the community. Such persons multiplied many times in the thousands of young people away from home in large cities make it necessary that we should pay special attention to all matters making for their welfare.

News Notes

Dr. J. S. W. McCullough and Dr. J. G. Fitzgerald, Toronto, are in England.

At the annual meeting of the Canadian National Council for Combating Venereal Diseases the old name was abandoned. The Council will in future be known as the "Canadian Social Hygiene Council." The new offices of the organization will be 207 York Building, King and York Streets, Toronto.

Dr. John T. Phair, of Toronto, Chief School Medical Officer under the Department of Education for the Province of Ontario, is the new Secretary of the Canadian Public Health Association.

It is a widely felt opinion that the annual meeting of the Canadian Public Health Association, held in St. John, was one of the most successful meetings ever held by the Association. The local committee had evidently paid a great deal of attention to initial organization work and hospitality on the part of the St. John Citizens was unbounded. A great deal of work was accomplished.

Mrs. Emmeline Pankhurst, during June and July, is touring Manitoba and Saskatchewan speaking on "Social Hygiene."

The Ontario Safety League have formed a "Safe Drivers' Club."

Dr. George D. Porter, Director of Health Services, University of Toronto, will represent the Canadian Association for the Prevention of Tuberculosis at the meeting in July, in Brussels, Belgium, of the International Union Against Tuberculosis.

A Round Table Conference on the Co-operation of Voluntary Agencies was held during the week of the Canadian Public Health

Association meeting in St. John, presided over by the Hon. Dr. Roberts. Dr. Roberts explained that the object of the meeting was to co-ordinate the work of various organizations and to attempt to make arrangements which would prevent the possibility of overlapping in time, energy and expense. Those present at the meeting representing organizations were: Canadian Red Cross Society, Col. Nasmith, C.M.G.; Victorian Order of Nurses, Miss Harry; Department of Health, Ottawa, Dr. Helen MacMurchy, and Dr. J. J. Heagerty; Canadian Medical Association, Dr. Hutchinson; Canadian Public Health Association, Committee on Policy; National Committee on Mental Hygiene, Dr. Hattie; National Council for Combating Venereal Diseases, Dr. Gordon Bates; Canadian Association for the Prevention of Tuberculosis, Sheriff Cook and Dr. Wodehouse; Provincial Medical Officers of Health, Nova Scotia, Dr. H. A. Chisholm; Alberta, Dr. Laidlaw; New Brunswick, Dr. G. G. Melvin; Ontario, Dr. R. R. McClenahan; Imperial Order Daughters of the Empire, Miss Liggett; Women's Institutes, Mrs. Harold Lawrence; Public Health Nurses, Miss H. T. Meiklejohn. A further announcement in reference to the work of this Round Table Conference will appear in an early number of the JOURNAL.



The Provincial Board of Health of Ontario

COMMUNICABLE DISEASES REPORTED FOR THE PROVINCE BY LOCAL BOARDS OF HEALTH FOR THE MONTH OF APRIL, 1922.

COMPARATIVE TABLE.

Diseases.	1922.		1921.	
	Cases.	Deaths.	Cases.	Deaths.
Smallpox	79	0	382	2
Scarlet Fever	249	11	365	7
Diphtheria	308	27	409	34
Measles	1266	8	284	0
Whooping Cough	69	8	165	16
Typhoid	13	7	32	5
Tuberculosis	207	135	196	121
Infantile Paralysis	1	1	.....	.....
Cerebro-Spinal Meningitis	9	8	7	6
Influenza .....	.....	89	.....	.....
Influenzal Pneumonia .....	.....	30	90	30
Primary Pneumonia .....	.....	372	.....	250
	<hr/>	<hr/>	<hr/>	<hr/>
	2201	696	1930	471

VENEREAL DISEASES REPORTED BY MEDICAL OFFICERS OF HEALTH.

COMPARATIVE TABLE.

	1922.	1921.
	Cases.	Cases.
Syphilis	194	219
Gonorrhoea	165	236
Chancroid	6	1
	<hr/>	<hr/>
	365	456

MUNICIPALITIES REPORTING SMALLPOX.

Carleton.....	Ottawa	4
	Huntley	5
Essex.....	Colchester, N.	2
Grey	Shallow Lake	1
	Sullivan	1
	Sydenham	1
Lincoln.....	St. Catharines	1
	S. Grimsby	1
Simcoe.....	Collingwood	1
Stormont D. & Glengarry.	Cornwall	1
Temiskaming.....	Bucke	2
Thunder Bay.....	Shrieber	1
Waterloo.....	Kitchener	7
	Waterloo Tp.	1
Welland	Niagara Falls	11
	Chippawa	1
York	Toronto	35
	Newmarket	3
		—
		79

The returns made of communicable diseases by Local Boards of Health for April show smallpox, scarlet fever, diphtheria and whooping cough are much less prevalent than in the corresponding month of 1921. The only epidemic is in measles and is confined chiefly to Toronto, where some 700 cases are reported out of 1,266 for the Province.

It will be noticed influenza and pneumonia caused more deaths than in 1921.

Editorial

PUBLIC HEALTH AND PUBLIC OPINION.

WE live in an age of miracles. The automobile, the flying machine, the wireless, telephone, the phonograph, moving pictures, all would have been looked upon as "black magic" only a few generations ago. Now they are the commonplaces of our every day existence. With the luxuries and amenities has come also a security from illness which our forefathers knew not. Typhoid seems almost a thing of the past; diphtheria is now a problem depending for its solution not on the finding of a new remedy, but on the more careful organizing of methods available. Tuberculosis diminishes. Infantile diseases are vigorously fought—Venereal Diseases are at least recognized—and in many parts of the world stories are written of other diseases gradually being eliminated from the scheme of things.

The millionaire brusque and business like bustles in with his money bags. His heart wrung with anguish—or perhaps his vanity or his conscience stung—he piles his money bags on the counter and sees lofty monuments to his benevolence rise. Clean wards—white uniforms—long rows of beds appear. He lifts his hat and retires, his fancy and his conscience both appeased.

And yet—and yet. Still the pestle and mortar are busily plied. Still the patent medicine manufacturer peddles his fatuous wares. Still even with the physician too often the ideals of a century ago persist. Hospitals increase in number that the ailing may be succoured. Blind pity and stupid charity hand in hand stand weeping, their doles in their poor hands.

And yet—and yet. The wards are full, and the toll of the dying is high. They die in comfort often—Thank God—but too early and too often. Ay, there is the rub, too early and too often still. And what shall we do about it?

Stand blinking! accepting calamity as fate and disaster as the dispensation of providence—or be about our business that life and happiness may be the lot of the many instead of the few and that the everlasting weeping of Rachael for her children may cease. No dream is that but a glorious and certain achievement of the future if we the people but will it.

But if the ideals of the past are to be replaced by a loftier sort knowledge must be broadcasted, not stored forever in the brains of brooding specialists. Let public health assume the place it deserves as first and foremost in the minds and hearts of public spirited men and women. Even millionaires, who after all are generally only particularly wise in the field in which they have succeeded—must learn from specialists how to spend the money they have made to the best advantage. Newspapers must learn to discriminate between sanity and insanity in the public health field and politicians must learn that the furthering of the health and welfare of the average man is a statesman's first duty, a duty which implies that saving the lives of children is a more important thing than the building of a dry dock or promoting the breeding of hogs or race horses, or even building a transcontinental railway. All of which achieved will make a long story. And the achieving thereof, withal, will mean a longer story still of new public health methods and new get together methods and a confiding in the public and an advertising of public health wares which have been unknown in the dim and unhealthy past.

MORE CO-OPERATION.

IN a later issue will appear resolutions passed by the Annual Meeting of the Canadian Public Health Association and by a Round-table of the various voluntary organizations dealing with the desirability of forming an Advisory Council to co-ordinate the work of the various nationally organized agencies engaged chiefly in public health work in Canada. It seemed to be the general feeling of the St. John meeting that public health interests would be furthered by some such definite step which would prevent overlapping and give the various associations the opportunity of consulting with one another in order to stimulate general public health activities more effectively.

The necessity for such a step in districts in which some particular phase or various phases of public health work may otherwise be neglected is obvious. The exact method of going about the process of co-ordination, however, is a little more difficult and will require considerable attention from the committee appointed to put the proposals of the St. John Meeting into effect. One suggestion brought forward was to the effect that voluntary agencies might pool their financial interests. The value of such a step at

the present time is questionable. It would seem that the various voluntary organizations have active supporters who generally have a special interest in a particular organization which they may have been backing for a long time. That citizens whose interest in public health over a period of years has been an interest directed along a special channel would be willing to at once transfer their enthusiasm to all phases of public health is doubtful, desirable though such a change of interest might be.

The main principle brought forward that in unity lies strength, however, is and always will be correct. It is to be hoped that the initial steps taken in St. John will result in some measure which will tend to something more closely approaching unity in public health ranks in Canada and the placing before the public of public health as the greatest interest rather than a minor interest for the state and the average citizen.

Notes on Current Literature

From the Health Information Service, Canadian Red Cross Society

School Health Supervision.

Dr. Josephine Baker shows that most physical defects in school children can be found during the eight to ten-year period. A thorough physical examination early in school life, followed by the correction of any physical defects, should make unnecessary the yearly repetition of a complete physical examination. The author believes that routine health inspection and annual tests for defective vision offer adequate health supervision after the first complete physical examination. ("American Journal of Public Health," June, 1922, page 465.)

Health Work in the Schools.

Dr. Thomas D. Wood outlines a scheme of effective work for the health of school children. ("The Journal of the National Education Association," May, 1922, page 177).

Diphtheria Prevention Work.

By Abraham Zingher, M.D., Assistant Director, Research Laboratory, Department of Health, New York City. An account of the diphtheria prevention work in the schools of New York City. The Schick test has been applied to a large number of school children, and the author reports some interesting observations from the tests in regard to the susceptibility of children of different classes and nationalities. ("Mother and Child," May, 1922, page 207.)

City Health Practice.

A report issued by the American Public Health Association on municipal health department administration in eighty-three first-class cities of the United States.

Rural Health Administration.

Report of the Committee on Rural Health Administration of the American Public Health Association. ("American Journal of Public Health," April, 1922, page 316.)

Health of Rural School Children.

Suggestions for improving the function of the rural school health programme by enlisting the co-operation of trustees, teachers, parents, school doctors and school nurses. ("The Public Health Nurse," March, 1922, page 145.)

The Health Plan for Maine.

The official and voluntary organizations interested in public health in Maine have united to carry out a health plan to place a

public health nurse in every community to teach every school child the practice of health habits, and to combat preventable diseases." ("The Nation's Health," May 15th, 1922, page 255.)

The Isolation Hospital in Preventive Medicine.

The Medical Officer of Health of Jarrow, England, reviews the present position of the isolation hospital in the control of communicable diseases. ("Public Health, S. M. O. H." May, 1922, page 222.)

Industrial Colonies for the Consumptive.

In a lecture before the Royal Institute of Public Health, the Medical Director of the Cambridgeshire Tuberculosis Colony, describes the general scheme of industrial colonies and village settlements for the consumptive. ("The Journal of State Medicine," May, 1922, page 185.)

Health Plays.

A series of health plays for teachers and pupils, by Honora Costigan, Director, Education Division, Minnesota Public Health Association.

The A. B. C. of Nutrition.

By Mary E. Sweeny, Dean of Home Economics, Michigan Agricultural College. ("Public Health," The Michigan Department of Health, May, 1922, page 575.)

Malnutrition and the Scales.

A protest against over emphasis of the child's weight in relation to height and age in estimating nutrition. ("Public Health," Michigan Department of Health, May, 1922, page 594.)

The Child, the Scales and the Tape Measure.

A discussion of the value of the weight of a child as a practical index of health. ("The Outlook," May 10th, 1922, page 67.)

